

RCE JWW

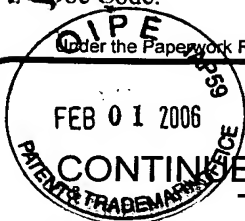
PTO/SB/30 (04-05)

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL

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Application Number	10/083,094
Filing Date	February 26, 2002
First Named Inventor	Smith
Art Unit	2631
Examiner Name	Freshteh N. Aghdam
Attorney Docket Number	920476-905000

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114**

Note: If the RCE is proper, any previously filed unentered and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

- a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ii. ☐ Other _____
- b. ☒ Enclosed
- i. ☒ Amendment/Reply iii. ☐ Information Disclosure Statement (IDS)
- ii. ☐ Affidavit(s)/Declaration(s) iv. ☐ Other _____

2. **Miscellaneous**

- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- b. ☐ Other _____

3. **Fees**

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

- a. ☒ The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments to Deposit Account No. 12-0913. I have enclosed a duplicate copy of this sheet.
- i. ☐ RCE fee required under 37 CFR 1.17(e)
- ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☐ Other _____
- b. ☒ Check in the amount of \$ 790.00 enclosed
- c. ☐ Payment by credit card (Form PTO-2038 enclosed)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Signature		Date	January 27, 2006
Name (Print / Type)	William M. Lee, Jr.	Registration No.	26,935

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature		Date	January 27, 2006
Name (Print / Type)	Minnie Wilson		

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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920476-905000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of : Martin Smith
Serial No. : 10/083,094
Filed : February 26, 2002
For : Improved Radio Communications Device
with Adaptive combination
Examiner : Agndam, Freshteh N.
Art Unit : 2631
Customer number : 23644

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Name of person signing Minnie Wilson

Signature Minnie Wilson
Minnie Wilson

FURTHER RESPONSE ACCOMPANYING REQUEST FOR CONTINUED EXAMINATION

Honorable Director of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

A Request for Continued Examination is being filed concurrently herewith, and this response is being submitted in view of comments made by the Examiner in his Advisory Action.

In the Advisory Action mailed January 17, 2006, the Examiner reasons that Wegner teaches a MIMO communications device. Applicants disagree.

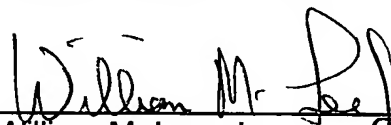
Wegner teaches a wireless base station. While Wegner, of course, supports communications for multiple users, the communication between any given pair of users is only a single channel. Contrary to the Examiner's allegation, there is no suggestion in Wegner that multiple simultaneous channels are used. MIMO communication requires multiple simultaneous communication channels between a given pair of users.

Applicants believe the Examiner may have been misled by the presence of multiple beams in Wegner. Wegner teaches a base station which can form N beams. However, Wegner does not teach that the beams are used simultaneously to support parallel communications channels between a given pair of users, as required for MIMO communications. In Wegner, signals are received at multiple antenna elements (shown as elements #1 - # m in box 26, Fig. 1) and applied to a Butler Matrix (20, Fig. 1). Each of the outputs of the Butler Matrix represent one of the N received beams. Each of the beams will carry signals for a particular user. Signals from each of the N beams are then simply routed by elements 14, 12 to an appropriate destination (see col.5 lines 39-43). Wegner does not teach "a processor arranged to operate on outputs of multiple receive chains to produce an output signal." Indeed, Wegner has no need to perform any such processing as the communication between any pair of users in the system of Wegner is only a single channel.

In view of the foregoing, the Applicants remain firmly convinced that the application distinguishes from the prior art and is allowable thereover. The Examiner's further and favorable reconsideration in that regard is urged.

January 27, 2006

Respectfully submitted,



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